Listing of Claims

1. (Original) A system, comprising:

a first interpolator to adjust a phase of an in-phase signal; and

a second interpolator to adjust a phase of a quadrature signal,

wherein the second interpolator adjusts the quadrature signal phase independently from the phase adjustment of the in-phase signal performed by the first interpolator.

2. (Original) The system of claim 1, wherein a non-orthogonal relationship exists between the adjusted phases of the quadrature and in-phase signals.

3. (Original) The system of claim 1, wherein the second interpolator adjusts the quadrature signal phase based on one or more predetermined increments.

4. (Currently Amended) The system of claim 1, wherein the first interpolator adjusts the phase of the in-phase signal to coincide with a first predetermined point on an eye diagram.

5. (Canceled)

6. (Currently Amended) The system of claim 4 [[1]], wherein the second interpolator adjusts the phase of the quadrature signal to coincide with a second predetermined point on an eye diagram, the phase of the quadrature signal at the second

predetermined point adjusted by the second interpolator to be non-orthogonal to the phase of the in-phase signal at said first predetermined point on the eye diagram.

7. (Currently Amended) The system of claim 6, wherein the second predetermined point is a widest point on the eye diagram.

8. (Original) The system of claim 1, further comprising:

a controller which sets at least one configuration value of the second phase interpolator, wherein the second phase interpolator adjusts the quadrature signal phase independently from the phase of the in-phase signal based on said at least one configuration value.

9. (Original) The system of claim 8, wherein said at least one configuration value includes an offset value for the quadrature signal phase.

10. (Original) A system, comprising:

a demodulator to generate in-phase and quadrature signals from a data signal; and

a phase adjuster to adjust a phase of the quadrature signal independently from a phase of the in-phase clock signal, wherein the adjusted phase of the quadrature signal corresponds to a clock signal.

11. (Original) The system of claim 10, wherein a non-orthogonal relationship exists between the phases of the quadrature and in-phase signals after said adjustment.

12. (Original) The system of claim 10, wherein the phase adjuster adjusts the quadrature signal phase based on one or more predetermined increments.

13. (Original) The system of claim 10, further comprising:

a sampler which samples the data signal based on said clock signal.

14. (Currently Amended) A method, comprising:

generating in-phase and quadrature signals from a data signal; and

adjusting a phase of the quadrature signal independently from a phase of the in-phase signal<u>, wherein said adjusting results in a non-orthogonal relationship between the phases of the quadrature and in-phase signals</u>.

15. (Canceled)

16. (Original) The method of claim 14, further comprising:

generating a representation of an eye diagram for the data signal; and

adjusting the quadrature signal phase to coincide with a first point on the eye diagram.

17. (Original) The method of claim 16, wherein the first point is a widest point on the eye diagram.

18. (Original) The method of claim 16, further comprising:

adjusting the in-phase signal phase to coincide with a second point on the eye diagram.

19. (Original) The method of claim 18, wherein the first point is a widest point and the second point is a crossing point in the eye diagram.

20. (Original) The method of claim 14, wherein adjusting the quadrature signal phase includes:

mapping a phase of the quadrature signal onto an eye diagram of the data signal;

determining a difference between the phase of the quadrature signal and a phase which coincides with a first point on the eye diagram; and

adjusting the quadrature signal phase to reduce said difference.

21. (Original) The method of claim 20, wherein the quadrature signal phase is adjusted to at least substantially eliminate said difference.

22. (Original) The method of claim 20, wherein the quadrature signal phase is adjusted in one or more predetermined increments to reduce said difference.

23. (Original) The method of claim 20, wherein the first point is a widest point on the eye diagram.

24. (Original) The method of claim 20, wherein adjusting the quadrature signal phase to reduce said difference does not change the phase of the in-phase signal.

25. (Original) The method of claim 14, further comprising:

sampling the data signal based on the adjusted quadrature signal phase.

26. (Original) A system, comprising:

a first circuit; and

a second circuit which includes:

(a) a demodulator to generate in-phase and quadrature signals from a data signal; and

(b) a phase adjuster to adjust a phase of the quadrature signal independently from a phase of the in-phase clock signal, wherein the adjusted phase of the quadrature signal corresponds to a clock signal used to control the first circuit.

27. (Original) The system of claim 26, wherein a non-orthogonal relationship exists between the phases of the quadrature and in-phase signals after said adjustment.

28. (Original) The system of claim 26, wherein the phase adjuster adjusts the quadrature signal phase based on one or more predetermined increments.

29. (Original) The system of claim 26, wherein the first circuit is at least one of a processor and a memory.

30. (Original) The system of claim 26, wherein the first circuit and second circuit are included on a same chip die.

31. (New) The system of claim 6, wherein the second interpolator adjusts the phase of the quadrature signal to the second predetermined point by one or more predetermined phase increments.

32. (New) The system of claim 31, wherein a difference between the phase of the in-phase signal at the first predetermined point and the phase of the quadrature signal at the second predetermined point corresponds to said one or more predetermined phase increments.

33. (New) The system of claim 31, further comprising:

sampling the in-phase and quadrature phase signals based on the independently adjusted phases of the in-phase and quadrature signals.